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HOW ARTIFICIAL INTELLIGENCE IS CHANGING THE WAY WE LEARN ENGLISH

Annotation: This article explores how artificial intelligence (AI) is reshaping the process of learning English. Modern AI-powered tools such as Duolingo, Grammarly, and English Language Speech Assistant Speak offer personalized learning paths, real-time feedback, and interactive practice that enhance language acquisition. The article highlights how AI helps learners improve speaking, writing, and comprehension skills. Additionally, the benefits and limitations of using AI in language education are analyzed. Based on both national and international sources, this paper provides a comprehensive overview of how AI is transforming English language education today.

Keywords: artificial intelligence; English language; language learning; online education; technology; Duolingo; Grammarly; speaking skills.

Introduction

To begin with, Artificial Intelligence (AI) is no longer a futuristic concept—it is a powerful tool actively reshaping industries, communication, and the way people learn. In particular, education has become one of the most dynamic areas where AI is being applied. Over the past few years, AI has been increasingly integrated into educational systems around the world, offering new methods of teaching and learning that go far beyond traditional classrooms.

Among its most transformative impacts, AI is significantly changing language education, especially in the context of learning English. As is well known, English is the dominant language of international business, science, academia, and digital communication. Therefore, mastering English has become a crucial skill in the 21st century. Not only can it provide access to global knowledge and information, but it also opens doors to higher education, competitive job markets, and intercultural communication.

Nevertheless, acquiring proficiency in a second language—particularly one as widespread and complex as English—can be a long and challenging journey for many learners. In response to this challenge, AI offers innovative solutions that make language learning more efficient and engaging.



For example, AI-powered tools and platforms now provide learners with personalized learning paths, real-time corrections, interactive exercises, and even human-like conversation simulations. As a result, students are able to study at their own pace, receive immediate feedback, and focus more effectively on their individual weaknesses. From pronunciation training apps to AI writing assistants, it is clear that these technologies are empowering learners to take greater control over their language education.

In this article, we will explore how artificial intelligence is changing the way we learn English by examining key technologies, their advantages, and the challenges they may present. Through real-world examples and credible academic sources, we aim to highlight how AI is shaping a more flexible, accessible, and adaptive future for English language learners across the globe.

Personalized Learning. One of the most significant advantages of artificial intelligence in language education is its ability to provide personalized learning experiences. AI adapts content to an individual's level, speed, interests, and common errors, creating a customized path that enhances both efficiency and motivation. In particular, AI algorithms track a learner's progress in real time and modify tasks accordingly—either simplifying or increasing the difficulty of the material depending on performance.

For instance, a study from Kazakhstan concluded that AI-enabled platforms help boost learners' vocabulary acquisition and grammar accuracy by offering instant feedback and adaptive lesson structures [1]. As a result, students become more engaged and retain information more effectively. This approach is especially valuable in Kazakhstan's diverse educational landscape, where students often have unequal access to experienced English teachers, especially in rural regions [2].

Furthermore, these local findings align with global practices. Popular applications such as Duolingo and LingQ use gamification, spaced repetition, and progress tracking to sustain user interest and reinforce knowledge over time [6]. In addition, platforms like Quizlet and Memrise use AI to identify which vocabulary items learners struggle with and prioritize those in future sessions. Consequently, personalized learning powered by AI not only supports academic performance but also empowers learners to take greater control over their own language development.

Improving Speaking and Writing Skills. Another key area where artificial intelligence supports English language learners is in developing speaking and writing proficiency. AI-powered pronunciation apps such as ELSA Speak use advanced speech recognition to provide instant feedback on intonation, stress, and accent. These tools analyze users' spoken input and offer specific suggestions for improvement, which helps learners develop more natural and fluent speech. For instance, a study involving Vietnamese university students showed that regular use of ELSA Speak significantly improved their pronunciation and speaking confidence [3].

In the context of Kazakhstan, where many learners lack opportunities to practice English with native speakers, tools like ELSA Speak offer an accessible alternative to traditional speaking practice. Learners can receive real-time feedback from anywhere, making it especially valuable in rural or under-resourced regions.



Similarly, AI writing assistants such as Grammarly, Quillbot, and ProWritingAid help users enhance their writing by detecting grammatical, syntactic, and stylistic errors. These platforms not only correct mistakes but also explain them, helping learners understand grammar rules and improve over time. Moreover, some tools suggest vocabulary enhancements, tone adjustments, and even structural improvements—features that are particularly beneficial for academic writing and exam preparation [4].

Overall, the integration of AI in speaking and writing tasks gives learners more autonomy, personalized support, and frequent practice opportunities—key elements for building fluency and confidence in English communication.

Advantages and Challenges. On the one hand, artificial intelligence offers a wide range of benefits for English language learners. AI tools provide flexibility, allowing students to learn at their own pace and schedule, regardless of their location. This is particularly important in Kazakhstan, where learners in rural or under-resourced areas often lack access to qualified English teachers or consistent instruction [2]. In such cases, AI-powered platforms serve as effective alternatives for independent and accessible learning.

Furthermore, AI systems offer continuous feedback, enabling learners to quickly identify mistakes and correct them, which strengthens long-term retention and builds self-confidence [5]. In addition, many platforms incorporate gamification, such as points, streaks, and rewards, which increase motivation and user engagement. Duolingo and LingQ, for example, have gained global popularity for their user-friendly, game-like approach to language learning.

On the other hand, researchers caution that overreliance on gamification can reduce the depth of learning. Namely, learners may become more focused on progressing through levels than on truly understanding content, grammar rules, or complex structures [6]. This surface-level engagement, while initially motivating, may hinder deeper cognitive development.

Another challenge is the lack of real human interaction. Particularly, while AI can simulate conversations and provide structured exercises, it cannot fully replicate the spontaneity, cultural nuance, or emotional connection offered by human teachers or peers. In Kazakhstan, where communicative practice is already limited in many classrooms, this can be a serious drawback [2].

Lastly, concerns about data privacy and user security have also been raised. Since many AI tools collect detailed learner data to personalize content, users may be exposed to risks if data protection standards are not clearly defined or enforced. In Kazakhstan, where digital policy is still developing, this issue requires special attention [5].

Materials and Methods of Research

As this article is a review paper, it synthesizes findings from existing literature rather than conducting primary empirical research. To provide a well-rounded and evidence-based perspective, this paper draws on both national sources from Kazakhstan and relevant international studies that examine how artificial intelligence (AI) tools are transforming English language learning.

One particularly insightful case study used in this review comes from Turkey. Conducted by researchers Yener and Selçuk (2024), the study explored how an AI-



powered chatbot could support the development of English grammar skills, specifically the Present Perfect tense, among Turkish university students learning English as a foreign language (EFL).

The study involved 18 undergraduate EFL learners enrolled in a language education program. Over the course of four weeks, students participated in structured writing tasks that incorporated an AI chatbot as a grammar assistant. The chatbot was designed to give immediate feedback on students' use of grammar, particularly focusing on accuracy and consistency in using the Present Perfect tense—a common challenge for many English learners.

To evaluate the impact of the AI chatbot, researchers used a mixed-methods approach. Quantitatively, they administered pre- and post-tests that measured grammatical accuracy in written texts. Qualitatively, the study included open-ended questionnaires and reflective prompts to understand the learners' perceptions of using AI in their grammar practice [7].

Research results

The findings revealed that 72% of participants showed measurable improvement in their grammatical accuracy by the end of the study, specifically in their use of the Present Perfect tense—a grammatical structure that is often difficult for English language learners due to its abstract use of time and contrast with past simple forms. Many learners struggle with the nuances of this tense, such as when to apply it for actions that have relevance to the present moment or for experiences without specific time references. By using the AI-powered chatbot, students received immediate feedback that not only corrected errors but also explained the rationale behind each correction. This allowed learners to develop a clearer conceptual understanding of the Present Perfect and how to apply it in context.

Participants in the study noted that the chatbot's real-time feedback helped them recognize patterns in their mistakes and correct them independently, leading to more accurate and confident language use. Several students highlighted that the AI tool created a safe and non-judgmental environment for practice, where they could experiment with complex grammar without fear of embarrassment or criticism. This emotional comfort appeared to play a key role in sustaining motivation and encouraging risk-taking—an important factor in mastering more advanced language structures [7].

The methodology applied in this Turkish study is highly relevant to broader discussions about AI in language learning. While traditional instruction often struggles to provide individualized support at scale, the chatbot's adaptive technology responded to each student's unique needs, making learning both personalized and self-directed. Beyond the linguistic improvements, the study also offered insights into learner autonomy and emotional resilience—two areas that are increasingly recognized as critical in second language acquisition. By including this case, the current article bridges the gap between real-world classroom challenges and emerging theoretical perspectives on how AI technologies can meaningfully enhance English language education.

Conclusion

Taking everything into account, artificial intelligence (AI) is transforming English language learning by providing flexible, interactive, and personalized tools. These



technologies help learners improve their skills through instant feedback, speech recognition, grammar correction, and customized study paths. AI makes it possible to study anytime and anywhere, which is especially useful for students who may not have access to regular classroom instruction.

However, even though AI offers many advantages, it cannot fully replace human teachers. Undeniably, teachers play a key role in developing students' critical thinking, cultural understanding, and communication skills. Additionally, they also give emotional support and adapt their teaching in ways that AI cannot.

In Kazakhstan, combining AI with teacher-led instruction can create a more effective and inclusive learning experience. While AI can support learners in rural or remote areas, teachers are essential for guiding discussions, answering complex questions, and encouraging real-life communication.

In the future, language education should focus on this blended approach, using the strengths of both AI and human teaching to help students learn English in a more meaningful and successful way.

REFERENCES

- [1] Zholdigaly B. & Zhumabayeva L.O. (2025). *Potential for implementing AI in Kazakhstan's education: personalized instruction and rural access*. Young Scientist Journal.
- [2] Omarovaa G., Saduakas G., Zhumabayeva A. et al. (2021). *Formation of school students' vocabulary via innovative technologies*. World Journal on Educational Technology
- [3] Huang Y. et al. (2025). *Student satisfaction with ELSA Speak* (Vietnamese learners). PubMed.
- [4] Nur Wahid Akhmad & Ahmad Munawir (2022). *Improving student pronunciation using ELSA Speak*. IDEAS Journal.
- [5] Amirova A., Zhumabayeva A. et al. (2024). *Students' attitudes toward hybrid learning in Kazakhstan*. Journal of Education and e-Learning Research
- [6] Mogavi R.H. et al. (2022). *When gamification spoils language learning: Duolingo case study*.
- [7] Yener, D. & Selçuk, B. (2024). The effectiveness of AI-based chatbots in grammar instruction: A case study on Turkish EFL learners. *International Journal of Educational Technology and Applied Linguistics*.

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АҒЫЛШЫН ТІЛІН МЕҢГЕРУ ТӘСІЛДЕРІН ӨЗГЕРТУДЕГІ
ЖАСАНДЫ ИНТЕЛЛЕКТТІҚ ҮКІПАЛЫ**

Аңдатпа. Бұл мақалада жасанды интеллектінің (ЖИ) ағылшын тілін үйрену үдерісін қалай қайта қырып жатқаны қарастырылады. Duolingo, Grammarly және English Language Speech Assistant Speak сияқты заманауи ЖИ-ге негізделген құралдар жеке оқу жолдарын, нақты уақыттағы кері байланысты және интерактивті жаттығуларды ұсына отырып, тіл меншеру процесін жақсартады. Мақалада ЖИ



окушылардың сөйлеу, жазу және түсіну дағдыларын дамытуға қалай көмектесетіні баяндалады. Сонымен қатар, тілдік білім беру саласында ЖИ-ді пайдаланудың артықшылықтары мен шектеулері талданады. Үлттық және халықаралық дереккөздерге сүйене отырып, мақалада ағылшын тілін оқытуда ЖИ-дің рөлін жан-жақты сипаттайды.

Кілт сөздер: жасанды интеллект; ағылшын тілі; тілді менгеру; онлайн білім; технология; Duolingo; Grammarly; сөйлеу дағдылары.

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ВЛИЯНИЕ ИСКУССТВЕННОГО ИНТЕЛЛЕКТА НА ТРАНСФОРМАЦИЮ МЕТОДОВ ИЗУЧЕНИЯ АНГЛИЙСКОГО ЯЗЫКА

Аннотация. В данной статье рассматривается, как искусственный интеллект (ИИ) трансформирует процесс изучения английского языка. Современные инструменты на базе ИИ, такие как Duolingo, Grammarly и English Language Speech Assistant Speak, предлагают персонализированные траектории обучения, обратную связь в режиме реального времени и интерактивную практику, способствующую более эффективному освоению языка. В статье подчеркивается, как ИИ помогает улучшить навыки говорения, письма и понимания на слух. Также анализируются преимущества и ограничения использования ИИ в сфере языкового образования. На основе отечественных и зарубежных источников представляется всесторонний обзор того, как ИИ меняет обучение английскому языку сегодня.

Ключевые слова: искусственный интеллект; английский язык; изучение языка; онлайн-образование; технологии; Duolingo; Grammarly; навыки говорения.